IN THE CLAIMS

1. (Currently Amended) A method of training a mobile station location identification system, comprising:

decoding a first unique identifier ~~for~~ that uniquely identifies a first cell that is in communication with a mobile station when the mobile station is located at a first location on a first boundary of the first cell at ~~and~~ a first time;

storing the first unique identifier and the first time;

decoding, upon handoff to a ~~next~~ second cell [,] at a second location on a second boundary of the second cell and at a second time at which the mobile station is located on the second boundary, a second unique identifier ~~for~~ that uniquely identifies the ~~next~~ second cell; and

storing the second unique identifier and the second time.

2. (Original) The method of claim 1, further comprising:

calculating a travel time for travel between the first location and the second location, comprising subtracting the second time from the first time to yield the travel time.

3. (Original) The method of claim 2, further comprising:

storing the travel time for travel between the first location and the second location.

4. (Original) The method of claim 3, wherein the stored travel time is indexed to a segment bounded by the first location and the second location.

5. (Original) The method of claim 1, wherein the unique identifier is a Cell Tower Identification Number

6. (Original) The method of claim 1, wherein the unique identifier is a Base Station Identifier.

7. (Original) The method of claim 3, wherein the travel time is stored in the mobile station.

8. (Original) The method of claim 3, wherein the travel time is stored in a server.

9. (Original) The method of claim 1, further comprising, deleting the stored travel time upon receipt of a signal from the mobile station.

10. (Currently Amended) A method of training a mobile station location identification system, comprising:

decoding a first unique identifier ~~for~~ that uniquely identifies a first cell that is in communication with the mobile station when the mobile station is located at a first location on a first boundary of the first cell;

transmitting the first unique identifier to a database;

receiving, at the database, at a first time, the first unique identifier;

storing, at the database, the first time and the first unique identifier;

decoding, upon handoff to a ~~next~~ second cell [,] at a second location on a second boundary of the second cell, a second unique identifier ~~for~~ that uniquely identifies the ~~next~~ second cell;

transmitting the second unique identifier to the database;

receiving, at the database, at a second time, the second unique identifier; and

storing, at the database, the second time and the second unique identifier.

11. (Original) The method of claim 10, further comprising:

calculating a travel time for travel between the first location and the second location, comprising subtracting the second time from the first time to yield the travel time.

12. (Original) The method of claim 11, further comprising:

storing the travel time for travel between the first location and the second location in the database.

13. (Original) The method of claim 12, wherein the stored travel time is indexed to a segment bounded by the first location and the second location.

14. (Original) The method of claim 10, wherein the unique identifier is a Cell Tower Identification Number.

15. (Original) The method of claim 10, wherein the unique identifier is a Base Station Identifier.

16. (Original) The method of claim 10, wherein the database is located in the mobile station.

17. (Original) The method of claim 10, wherein the database is located in a server.

18. (Original) The method of claim 10, further comprising, deleting the stored travel time from the database upon receipt of a signal from the mobile station.

19. (Currently Amended) A method of calculating an estimated time of arrival of a mobile station at a segment endpoint, of a segment having a startpoint and an endpoint, comprising:

a) detecting the startpoint of the segment at a first time;

b) storing the first time; and

c) calculating an estimated time of arrival at the endpoint of the segment, the calculating step comprising:

    c1) retrieving a stored travel time for travel along the segment from a database, wherein the stored travel time is derived using a method comprising:

        i) decoding a first unique identifier that uniquely identifies for a first cell that is in communication with a mobile station when the mobile station is located at the startpoint on a first boundary of the first cell at and a start time;

ii) storing the first unique identifier and the start time;

iii) decoding, upon handoff to a ~~next~~ <u>second</u> cell [,] at the endpoint <u>on a</u> <u>second boundary of the second cell</u> and at an end time <u>at which the</u> <u>mobile station is located at the second boundary</u>, a second unique identifier ~~for~~ <u>that uniquely identifies</u> the ~~next~~ <u>second</u> cell;

iv) storing the second unique identifier and the end time; and

v) subtracting the end time from the start time and storing a result as the stored travel time; and

c2) adding the stored travel time and the first time to yield the estimated time of arrival of the mobile station at the endpoint of the segment.

20. (Original) The method of claim 19, wherein the database is located in the mobile station.

21. (Original) The method of claim 19, wherein the database is located in a server.

22. (Original) The method of claim 19, wherein the estimated time of arrival of the mobile station at the endpoint of the segment is calculated at the mobile station.

23. (Original) The method of claim 19, wherein the estimated time of arrival of the mobile station at the endpoint of the segment is calculated at the server.

24. (Original) The method of claim 19, wherein the stored travel time includes statistical data to use in the calculation of the estimated time of arrival.

25. (Original) The method of claim 24, wherein the statistical data includes variance due to time of day in stored travel times for travel along the segment.

26. (Original) The method of claim 24, wherein the statistical data includes variance due to day of year in stored travel times for travel along the segment.

27. through 42. (Canceled)

43. (Currently Amended) A system for calculating an approximate location of a mobile station along a recurrent route of travel between a first location and a second location, comprising:

a first cellular base station [,] configured to provide cellular coverage to the mobile station in a ~~geographic area~~ first cell having a first boundary including the first location;

a second cellular base station [,] configured to provide cellular coverage to the mobile station in ~~an area~~ a second cell having a boundary including the second location;

a database [,] configured to store a previously measured time of travel of the mobile station from the first location to the second location, the previously measured time of travel having been calculated by a method including subtracting (1) a first time at which the mobile station was at the first location on the first cell's boundary, from (2) a second time at which the mobile station was at the second location on the second cell's boundary; and

a processor [,] configured to calculate the approximate location of the mobile station along the recurrent route of travel between the first location and the second location using the previously measured time of travel stored in the database.

44. (Original) The system of claim 43, wherein the approximate location is calculated in terms of time to reach the second location.

45. (Original) The system of claim 43, wherein the approximate location is calculated in terms of time from the first location.

46. through 49. (Canceled)